## Art. IV.—Description of a New Marine Shell of the Genus Larina.(?)

## By J. H. GATLIFF AND C. J. GABRIEL.

(With Plate XIII.)

Read 10th June, 1909.

## Larina (?) turbinata, sp. nov.

Shell fragile, turbinate, umbilicate, white, semi-transparent, vitreous interiorly, whorls six, including the minute embryonic apex of two whorls, which are of a brown colour and appear to be smooth, but under the microscope they are densely spirally pitted. Whorls very rapidly increasing, the last and penultimate comprising nearly the whole of the shell, the whorls are ventricose, suture deeply impressed. Sculpture, faint; under the lens it is densely, irregularly, spirally striate, the striae being somewhat undulating, and crossed by growth lines of about similar strength.

The mouth is circular, peristome continuous, slightly reflexed; umbilicus small, deep, almost hidden by the reflexion of the lip.

The shell is partly covered with an olivaceous epidermis.

The operculum of the type was lost, but a microscopic examination of the embryonic form shows a horny operculum, annular, and with the nucleus intramarginal.

Dimensions of Type.—Height, 15 mm.; width, 16 mm.; width of radula, .54 mm.; embryonic forms, height .625 mm., width .597 mm.

Hab.—Dredged in about five fathoms, between Phillip and French Islands, Western Port.

Obs.—The genus Larina was established by A. Adams for a shell obtained at Moreton Bay, Queensland, and he included it in the family Viviparidae. When obtained our type had the animal in it, which, upon extraction, was found to contain about

400 embryonic shells, most of which are shown in Figure 3. Upon another occasion an almost entire, empty shell was dredged, and at other times a half-grown specimen and portions of the shell have been similarly obtained.

Judging from the description and figure (we have not seen the type) the main points of difference in our shell when compared with the typical Larina are: ours is umbilicate and the peristome is continuous; and in consequence of these differences we have only placed it provisionally in the genus.

A very incomplete half-grown specimen has been sent to us by Miss Lodder, Tasmania; it was found by her years ago on the North Coast.

Mr. E. A. Smith remarks<sup>1</sup>: "The genus Larina supposed by Adams to be marine; it has, however, very close relationship to Vivipara on account of similarity of the opercula, and it is undoubtedly a fresh-water form, as is clearly shown in the British Museum specimen obtained in McKenzie River by the Port Essington Expedition during the year 1845." The question arises, Was it obtained at a portion of the river beyond tidal influence! Our specimens were dredged in the sea fully a mile from the shore, and there are no running streams in the vicinity.

We are indebted to Mr. F. Chapman, of the National Museum, Melbourne, for his skilful work in photographing the specimens. Type in Mr. C. J. Gabriel's collection,

## EXPLANATION OF PLATE XIII.

Larina (?) turbinata, sp. nov.

Fig. 1.—Position of body whorl of embryonic form.

Fig. 2.—Radula of type.

Fig. 3.—Group of embryonic forms.

Fig. 4.—Embryonic forms.

Fig. 5.—Dorsal aspect of type.

Fig. 6.—Front aspect of type.

Fig. 7.—Basal aspect of type.

All of the figures variously magnified.

<sup>1</sup> Jour. Linn. Soc. Lond., 1881, vol. xvi., p. 266,